# **Quality of Life Performance Standards** Lighting

December 2003

# **Highlights**

This fact sheet is one of six that have been created to assist the public in the review of the draft quality of life performance standards developed to minimize the impacts of the Hudson River cleanup on local communities. It describes the primary components of the performance standard for lighting from the project. Information on the performance standards for air quality, odor, noise and navigation can be found in a general overview and in individual fact sheets on these topics, and in the Draft Quality of Life Performance Standards document, which is available for public review and comment.

The public comment period for the draft quality of life performance standards begins on December 19, 2003 and ends on February 17, 2004.

### **Background**

The February 2002 Record of Decision (ROD) for the Hudson River PCBs Superfund site requires the development of performance standards that set specific goals and requirements for the project. The quality of life performance standards are intended to reduce the effects of the dredging; sediment processing, transferring, and dewatering; and support operations on people, businesses, recreation, and community activities in the project area. The U.S. Environmental Protection Agency (EPA) will review project design plans for consistency with the quality of life performance standards and will oversee cleanup activities to ensure that they are met.

### **Lighting Standard**

To ensure worker safety, lights will be used to illuminate cleanup operations. During nighttime dredging, lighting will be needed for vessel navigation and for illuminating work areas. In addition, lights will be needed at the sediment processing/transfer facilities in the dock areas, rail yards, staging areas, and parking lots.

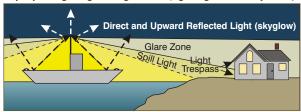
Lighting will be measured in footcandles using a brightness meter. For rural and suburban residential areas, the lighting standard will be 0.2 footcandle. In urban residential areas, 0.5 footcandle will be the standard, while in commercial/industrial areas a higher standard of 1 footcandle will be set. For comparison purposes, the brightness in general office work areas and classrooms is usually 10 to 50 footcandles.

Light from glare, light trespass, and/or sky glow also can affect quality of life. These lighting effects are described below:

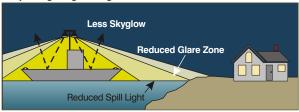
- Glare is the sensation produced by light that is greater than the light to which the eyes are adapted, resulting in limited visibility.
- Light trespass is caused by light that can stray from work areas.
- Sky glow is the brightening of the night sky that results from reflected light.

Lighting at the sediment processing/transfer facilities and dredging operations will be directed toward work areas and away from neighboring properties. Measures that will be used to minimize impacts from light include proper positioning of lights, beam direction, and shielding. Examples of lighting effects on a home are shown on the figures below.

Improper Lighting Configuration (lighting will be adjusted)



**Proper Lighting Configuration** 



## **Compliance with the Lighting Standard**

Compliance with the standard will require the monitoring of light levels at the shoreline for dredging operations or site perimeter for facility operations. In addition, monitoring may be done closer to residential areas or businesses when needed to further assess light-level effects. Monitoring will be conducted three times each evening between 10 p.m. and dawn.

Light level monitoring will guide the actions required to comply with the standard during the cleanup:

- If the lighting standard is not exceeded, operations will continue as designed, with regular reporting to EPA.
- If lighting levels are temporarily exceeded and they can be easily and immediately controlled, or if a project-related complaint is received:
  - the exceedance and/or complaint will be investigated,
  - appropriate steps will be taken to resolve the complaint and/or exceedance,
  - follow-up with the person who made the complaint will be conducted, and
  - follow-up reporting to EPA will be conducted.
- If the lighting exceedance cannot be easily or immediately controlled, or if frequent /recurrent complaints are received:
  - the exceedance and/or complaint will be investigated,
  - additional monitoring will be performed as needed
  - an action plan will be developed and implemented.

- follow-up with the person who made the complaint will be conducted, and
- EPA will be notified within 24 hours of discovery, and a detailed report will be prepared.

EPA will evaluate the methods and frequency of sampling and monitoring as the project proceeds and will consider any necessary changes when appropriate.

EPA will work with local officials and communities through various stakeholder groups, including the Community Advisory Group (CAG), to keep them upto-date on compliance with the performance standard. EPA and/or personnel responsible for dayto-day operations will provide updates through verbal and written notifications and regularly scheduled stakeholder and CAG meetings.

#### **Public Review**

The Draft Quality of Life Performance Standards document is available at the information repositories located in Glens Falls, Ft. Edward (Hudson River Field Office), Ballston Spa, Albany, Poughkeepsie, New York City (EPA Region 2 offices) and in Edgewater, New Jersey. Electronic versions can be found on the EPA project Web site (www.epa.gov/hudson). Copies are also available in print and on CD-ROM by calling the Hudson River Field Office. The public can submit comments in writing via hard copy and email. All comments should be sent to:



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# For More Information

Visit, call, or write to the Hudson River Field Office at the address below or log on to www.epa.gov/hudson.

#### **EPA Contacts**



## Community Involvement Coordinator Hudson River Field Office

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The Field Office hours are Monday – Friday 8:00 am – 4:30 pm, with evening hours by appointment.

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### **EPA Regional Public Liaison**

EPA Region 2 has designated a public liaison as a point-of-contact for community concerns and questions about the federal Superfund program in New York, New Jersey, Puerto Rico, and the U.S. Virgin Islands. To support this effort, the Agency has established a 24-hour, toll-free number that the public can call to request information, express concerns, or register complaints about Superfund. The public liaison for EPA's Region 2 office is: George H. Zachos, U.S. EPA, Region 2, 2890 Woodbridge Avenue MS-211, Edison, New Jersey 08837, (732) 321-6621, Toll-free (888) 283-7626.